Hydrologic Model Manager

Short Name	SIRG
Long Name	– Numerical Model of Surface Runoff, Infiltration, River Discharge and Groundwater Flow
Description	
Model Type	Physically-based, process-oriented, lumped parameter, distributed model
Model Objectives	To develop a physically based model of runoff for conjunctive use of surface water and groundwater.
Agency Office	Department of Civil Engineering, Ajou University, Suwon, South Korea
Tech Contact	Professor Dong Hoon Yoo
Model Structure	It is comprised of four modules representing surface runoff, infiltration, river discharge, and ground water flow. Each module is based on theoretical description of physical processes.
Interception	
Groundwater	
Snowmelt	
Precipitation	
Evapo-transpiration	
Infiltration	
Model Paramters	11 parameters where 4 are for surface runoff, 4 for infiltration, 2 for river discharge, and 1 for groundwater flow.
Spatial Scale	Grid size
Temporal Scale	Continuous, limited by the grid size
Input Requirements	Basin area maps, river cross-sections, rainfall hyetographs, and soil characteristics.
Computer Requirements	PC with windows
Model Output	Discharge hydrograph
Parameter Estimatn Model Calibrtn	Parameters are obtained from physical characteristics and are refined by model calibration.
Model Testing Verification	Limited testing by comparison with observed discharge values.
Model Sensitivity	Not reported
Model Reliabiity	Nor reported
Model Application	Yang-yang Namdae-chun watershed in northeast Korea
Documentation	Not available in public domain but it can be obtained from Progessor D. H. Yoo.
Other Comments	
Date of Submission	5/11/2001 9:12:19 AM
Developer	
Technical Contact	

Contact Organization	